

### Abstract

Phosphorescent OLEDs having a double doped-layer structure wherein the OLEDs include a hole transporting layer (HTL) having a phosphorescent material doped therein, and an electron transporting layer (ETL) having the same phosphorescent material doped therein. Typically, these phosphorescent OLEDs have an anode, a first HTL over the anode, a second HTL that is doped with a phosphorescent material over the first HTL, a first ETL that is doped with a phosphorescent material over the second HTL, a second ETL over the first ETL, and a cathode over the second ETL. These phosphorescent OLEDs preferably include blue phosphorescent OLEDs with high efficiency levels.